

Amendments To The Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1-44. (Previously Canceled)

45. (Currently Amended) An annulus stent for repairing an aperture in an intervertebral disc annulus comprising a centralized vertical extension connected at one end to at least one lateral extension, wherein, in use, the at least one lateral extension is placed in the subannular space, and wherein the centralized vertical extension comprises with an upper section and a lower section, and a recess between the upper section and the lower section, enabling wherein the centralized vertical extension annulus stent to forms a compatible non-sealing fit with the edges of an aperture.

46. (Currently Amended) The annulus stent of claim 45 wherein the upper section of the centralized vertical extension comprises a slot, where the slot 18 forms an orifice through the upper section.

47. (Previously Presented) The annulus stent of claim 46 wherein the slot is positioned within the upper section such that it traverses the longitudinal axis of the upper section.

48. (Previously Presented) The annulus stent of claim 47, wherein the slot is sized and shaped to accommodate sutures, tension bands, or staples.

49. (Currently Amended) An implantable device for therapeutically or prophylactically treating the annulus of a patient's intervertebral disc, the annulus having an aperture having an aperture dimension along a selected axis, said device comprising a body having a delivery configuration and an implanted configuration, wherein:

in said delivery configuration said device has at least one first dimension no larger than said aperture dimension; and

in said implanted configuration said device has at least one second dimension at least as large as larger than said aperture dimension; and

wherein, in said delivery configuration, said device is constructed to pass substantially through said aperture, and in said implanted configuration, said device is constructed to span the aperture subannularly substantially along said selected axis with substantially no trauma to the aperture.

50. (Previously Presented) The implantable device of claim 49, wherein said second dimension lies along a different axis than said first dimension.

51. (Previously Presented) The implantable device of claim 50, wherein, in use, said device is constructed and sized to be capable of subannular reorientation.

52. (Previously Presented) The implantable device of claim 51, wherein said reorientation comprises rotation.

53. (Previously Presented) The implantable device of claim 51, wherein said reorientation comprises deforming the device.

54. (Previously Presented) The implantable device of claim 49, wherein said second dimension results from causing or allowing the device to expand from said delivery configuration.

55. (Previously Presented) The implantable device of claim 49, wherein said aperture dimension is a lateral width measured substantially perpendicular to the normal axis of the spine.

56. (Previously Presented) The implantable device of claim 49, wherein said aperture dimension is a height measured substantially parallel to the normal axis of the spine.

57. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of synthetic biocompatible material.

58. (Previously Presented) The implantable device of claim 57, wherein said biocompatible material is polyethylene.

59. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of bioresorbable material.

60. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of polytetrafluoroethylene.

61. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of material to facilitate regeneration of disc tissues.

62. (Currently Amended) The device of claim 49, wherein at least a portion of the device is formed at least in part of ~~shape memory~~ flexible, resilient material.

63. (Canceled) The implantable device of claim 62, wherein said shape memory material is nitinol.

64. (Previously Presented) The device of claim 49, wherein said device further comprises a flexible bladder.

65. (Previously Presented) The device of claim 64, wherein said bladder further comprises a fluid.

66. (Previously Presented) The device of claim 65, wherein said fluid is a gel.

67. (Previously Presented) The implantable device of claim 49, wherein said aperture dimension is measured during delivery of said implantable device.

68. (Previously Presented) The implantable device of claim 49, wherein said aperture dimension is measured after delivery of said implantable device.

69. (Previously Presented) The implantable device of claim 49, wherein said aperture dimension is measured before delivery of said implantable device.

70. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of a polymer.

71. (Previously Presented) The device of claim 70, wherein at least a portion of the device is formed at least in part of a polymeric sheet.

72. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of allograft.

73. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of autograft.

74. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of xenograft.

75. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of porous mesh.

76. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of fibrous material.

77. (Previously Presented) The device of claim 49, wherein at least a portion of the device is formed at least in part of biocompatible fabric.

78. (Previously Presented) The device of claim 49, further comprising an attachment element for facilitating fixation of the device to anatomical features of the patient.

79. (Previously Presented) The device of claim 78, wherein said anatomical features include vertebral bodies.

80. (Previously Presented) The device of claim 78, wherein said anatomical features include the annulus fibrosus.

81. (Previously Presented) The device of claim 49, further comprising attachment means for securing said device within the patient.

82. (Previously Presented) The device of claim 81, wherein said attachment means comprise sutures.

83. (Previously Presented) The device of claim 81, wherein said attachment means comprise tension bands.

84. (Previously Presented) The device of claim 81, wherein said attachment means comprise staples.

85. (Previously Presented) The device of claim 81, wherein said attachment means comprise barbs.

86. (Currently Amended) A device for treating a defect in an intervertebral disc annulus, the device comprising of a body having a delivery configuration and an implanted configuration, wherein:

in said delivery configuration said device has at least one first dimension permitting the device to be passed into or through the defect; and,

in said implanted configuration said device has at least one second dimension that is at least as large as said defect;

wherein in said implanted configuration, said device is constructed to at least partially span the defect subannularly with substantially no trauma to the defect.

87. (Currently Amended) An implantable device for treating an aperture in the annulus fibrosus of an intervertebral disc, the device comprising a collapsible body, wherein the body is characterized by:

a first collapsed configuration dimensioned to be at least partially delivered through the aperture; and,

a second expanded configuration having at least one dimension at least as large as said aperture;

wherein, in said first configuration, said device is constructed to pass substantially through said aperture, and in said second configuration, said device is constructed to span the aperture subannularly with substantially no trauma to the aperture.

88. (Currently Amended) A device for treating an intervertebral disc having an aperture in the annulus fibrosus, wherein the aperture provides a pathway for the migration of intradiscal material from the subannular space, the device comprising a barrier body wherein the body has:

a first dimension during deployment permitting said device to pass through the aperture and,

a second post-deployment dimension whereby said second dimension at least partially spans said aperture, thereby restricting the migration of intradiscal material through the aperture;

wherein said device is constructed and arranged to span the aperture subannularly with substantially no trauma to the aperture.

89. (New) An annulus stent for repairing an aperture in an intervertebral disc annulus comprising a centralized vertical extension with an upper section and a lower section, and a recess between the upper section and the lower section, enabling the annulus stent to form a compatible fit with the aperture; wherein the upper section of the centralized vertical extension comprises a slot, where the slot forms an orifice through the upper section.

90. (New) The annulus stent of claim 89 wherein the slot is positioned within the upper section such that it traverses the longitudinal axis of the upper section.

91. (New) The annulus stent of claim 90, wherein the slot is sized and shaped to accommodate sutures, tension bands, or staples.

92. (New) The device of claim 49, wherein at least a portion of the device is formed at least in part of polymer fibers.

93. (New) The device according to claim 61 wherein the material for facilitating regeneration includes at least in part a tissue growth factor.